large, ground-dwelling beetles, but centipedes and scorpions and occasionally small bats are also consumed. Here, we report a direct observation of one Heart-nosed Bat feeding on a *Hemidactylus mabouia*.

While working on an informational exhibit on the harmless snakes of Kasigau at the Taita Discovery Center (TDC), Edwin Selempo, head naturalist for the TDC, heard the unmistakable sound of small bones being crunched overhead. Just 3.5 m above us was a *C. cor* hanging by its hindfeet from the thatch roof, munching on the hindquarters and tail section of what was left of a *H. mabouia*. By the time DW retrieved his camera, just the tail section above the cloaca could be seen protruding from the bat's mouth (Fig. 1). We watched the bat consume most of the tail as it flew from one part of the ceiling to another, avoiding two other heart-nosed bats attempting to steal the, as yet, uneaten tail. Observations were made at 0800 h on 30 July 2004, under the roof of an open-air classroom at the Taita Discovery Center, Rukinga Ranch, Taita/Taveta District-Coast Province, Kenya.

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HOPLODACTYLUS MACULATUS (Common Gecko). **AGGREGATIONS**. Aggregative behavior has been observed in many squamate lineages (e.g., Brattstrom 1974. Amer. Zool. 14:35–49; Cooper and Gartska 1987. Copeia 1987:807–810; Gregory 2004. Herpetologica 60:178–186). However, lizard aggregations in diurnal retreat sites are rarely documented (Shah et al. 2003. Behaviour 140:1039–1052). Hence, we report here on the demographic structure of an unusually large (N = 94), diurnal aggregation of *Hoplodactylus maculatus* on a New Zealand island. On 17 May 2004 (autumn), we surveyed the *H. maculatus* occupying wooden, pest-control bait boxes as diurnal retreat sites. The bait boxes, deployed on the shoreline of Mana Island (40°40'S, 174°00'E) to control accidental rodent (e.g., *Rattus* sp.) incursions, ranged in size from 8.3 to 12.4 L, each with an internal central 0.5 L bait partition where the geckos commonly congregated beneath the bait holder. Fourteen bait boxes were surveyed between 1000 and 1500 h.

A total of 183 *H. maculatus* were found within the 14 bait boxes, with a mean of 13 ± 6 SE geckos per box. However, one bait box contained about half (N = 94) of all geckos captured, and two lacked geckos entirely. The aggregation of 94 geckos (39 juveniles, 11 males, 44 females) was very densely packed within the 0.5 L partition of the bait box, filling the entire area to capacity. Snout–vent length of adult males was slightly larger than adult females (72.7 ± 0.7 and 69.0 ± 0.7 SE mm respectively; $F_1 = 10.330$, $p = 0.002$) and did not differ between the large and smaller aggregations ($F_1 = 2.015$, $p = 0.160$). Overall, 36% of geckos in bait boxes were juvenile or sub-adult, 16% adult males and 48% adult females. The adult sex ratio varied substantially among bait box aggregations (range = 1:7 to 2:0 m:f). The only other lizard species found within the bait boxes was the skink *Oligosoma lineoocellatum*, one of which was found in a bait box with six *H. maculatus*, but not within the bait partition containing geckos.

Hoplodactylus maculatus, a moderate-sized (to 82 mm SVL) widespread, endemic, nocturnal gecko (Gill and Whitaker 2001. New Zealand Frogs and Reptiles, David Bateman, Auckland, New Zealand. 112 pp.), is frequently observed in diurnal aggregations. However, few aggregations have been documented, and details and measurements of aggregations have not been reported. For example, on Stephens Island, Cook Strait, up to 200 individuals were found beneath a corrugated iron sheet (Bauer 1990. Phylogenetic Systematics and Biogeography of the Carphodactylini [Reptilia: Gekkonidae]. Bonn. Zool. Monogr. 30, 217 pp.) and on Mana Island mixed age and sex groups of 10–15 individuals are common, with occasional large aggregations of >60 individuals (Whitaker 1993. Unpubl. report, New Zealand Department of Conservation, Wellington, New Zealand. 53 pp.).

Hoplodactylus maculatus is unlikely to aggregate because of a lack of suitable retreat sites, as the shore platform provides a complex habitat of rocks and logs that could be readily used. Aggregation, despite an abundance of retreat sites, could imply that the benefit may derive from social groups (Shah et al., *op. cit.*). However, the high variance in adult sex ratios suggests that aggregations may not always represent family groups or harems. Aggregative behavior in the nocturnal gecko *Nephrurus milii* might have evolved to provide facultative control over rates of thermal exchange (Shah et al., *op. cit.*), which offers a possible explanation for aggregations of *H. maculatus*. Other *Hoplodactylus* species have also been observed to aggregate in mixed size and sex class groups, including *H. duvaucelii* (Robb 1980. New Zealand Amphibians and Reptiles in Colour. Collins, Auckland, New Zealand. 128 pp.) and *H.* sp. 'Otago-Southland large' (Southey 1986. Unpubl. report, New Zealand Wildlife Service, Queenstown). Aggregation might be widespread and frequent in the genus *Hoplodactylus*, but its purpose needs clarification.

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LEIOCEPHALUS CARINATUS ARMOURI (Northern Curly-tailed Lizard). **ENTANGLEMENT IN HUMAN-MADE MATERIALS**. Reports exist of reptiles caught in persistent, man-made debris. These materials result in deformity or death to freshwater turtles (Dietz and Ferri 2003. Herpetol. Rev. 34:56; McLeod 1994. Herpetol. Rev. 25:116–117; Odum 1985. Herpetol. Rev. 16:113) or tortoises (Engeman et al. 2004. Herpetol. Rev. 35:54–55); entanglement, injury, and death to upland snakes (see review in Stuart et al. 2001. Herpetol. Rev. 32:162–164); and, entanglement and death to desert lizards (Stuart et al., *loc cit.*). Here we add to these reports with an observation of *Leiocephalus carinatus armouri* found entangled in a metal ring.

At ca. 0830 h, 26 October 2003, a sunny day with a temperature ca. 25°C, one of us (CLD) observed an adult (71.0 mm SVL) *L. c. armouri* with a metal ring (22 mm exterior diameter, ca. 17–18 mm interior diameter) caught around its body just forward of the

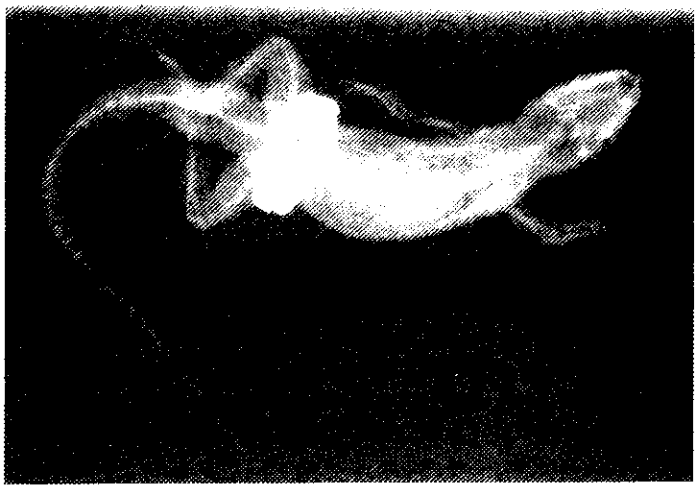

FIG. 1. Radiograph of *Leiocephalus carinatus armouri* entangled in a metal ring.

pelvic girdle (Fig. 1). The site was the parking lot of "Loggerhead Plaza" (14255 US Highway 1 in Juno Beach [Palm Beach Co.], Florida). The town of Juno Beach is within a relatively contiguous 90 km of the surveyed, occupied range of this exotic species in Florida (Smith and Engeman 2003. Florida Park Service Tech. Rep., Hobe Sound, Florida; Smith et al. *In press*. International Biodeterioration and Biodegradation).

The lizard was first observed basking on a curb in the parking lot. Under normal conditions, *L .c. armouri* is very fast fleeing when making an escape to a burrow or other refugium (Smith and Engeman, *loc. cit.*; Meshaka et al. 2004. The Exotic Amphibians and Reptiles of Florida, Krieger Publishing Company, Malabar, Florida. 166 pp.). Although this lizard attempted to elude capture, mobility was hindered by the metal ring, and it was unable to fully extend its hind legs, causing it to drag the distal portion of its body.

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MICROLOPHUS QUADRIVITTATUS (NCN). **CANNIBALISM.** *Microlophus quadrivittatus* is a lizard restricted to the southern part of the coastal desert in Peru (Carrillo and Icochea 1995. Pub. Mus. Hist. Nat. UNMSM 49:1–27). Its diet consists of intertidal invertebrates, marine algae, and some dipterans (Donoso-Barros 1966. Reptiles de Chile. Ediciones Univ. Chile, Santiago. 458 pp.; Perez and Jahncke 1998. Bol. Inst. Mar del Peru 17:81–86), but cannibalism is unreported. Here, we provide the first report of cannibalism in this species.

At 1200 h on 23 March 2000, we captured an adult male *M. quadrivittatus* (146 mm SVL, 85 g, MHNSM 18598) among rocks near the sea shore at Coles Point (17°42'S; 71°22'W; elev. 5 m), Departamento de Moquegua, Peru. The stomach of the adult male *M. quadrivittatus* contained a conspecific juvenile (ca. 70 mm SVL, 8.9 g., MHNSM 18599). The juvenile lacked apparent bite marks, but its tail was partially broken. Additionally, we examined the stomach contents of 20 other *M. quadrivittatus* from this same locality, but this was the only record of cannibalism among them (unpubl. data).

Adults and juvenile of *M. quadrivittatus* show differences in their microhabitat use that would reduce opportunities for cannibalism (Donoso 1948. Bol. Mus. Nac. Hist. Nat. 34:213–216), but the frequency of this phenomenon remains unknown.

Both specimens were deposited in the Department of Herpetology collection of the Museo de Historia Natural de la Universidad Nacional Mayor de San Marcos, Lima, Peru. We thank Carlos Frederico D. Rocha and Edgar Lehr for beneficial comments on versions of this manuscript.

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NEOSEPS REYNOLDSI (Sand Skink). **LONGEVITY.** Skinks in general are relatively long-lived (e.g., *Eumeces fasciatus* can live up to 10 years; Fitch 1965. Univ. Kansas Mus. Nat. Hist., Misc. Publ. [42]:1–60). Fossorial skinks have exceptionally low metabolic rates (Andrews and Pough 1985. Physiol. Zool. 58:214–231; Withers 1981. Copeia 1981:197–204) and thus might be expected to be particularly long-lived. *Neoseps reynoldsi* is a fossorial skink for which estimates of longevity range from 3 (Telford 1959. Copeia 1959:110–119) to 7 years (Sutton 1996. MSc thesis, Univ. of South Florida, Tampa. 45 pp.). Here, we present mark-recapture information on a *N. reynoldsi* from Archbold Biological Station, Highlands Co., Florida that exceeds previous estimates of longevity.

On 11 March 2002, we captured a marked (left foreleg removed) *N. reynoldsi* (62 mm SVL, 1.3 g) under a coverboard. During 1994 an individual (54 mm SVL) at this study site was given this mark. No individuals at this site have been marked since 1994. *Neoseps reynoldsi* have greatly reduced limbs with one (forelegs) or two (hindlegs) small digits per foot. That the mark was from natural loss is unlikely because, 1) the entire left foreleg was removed, and 2) of ~100 *N. reynoldsi* captured by KGA none has ever been missing entire limbs. Mark-recapture data suggest that *N. reynoldsi* reach 54 mm SVL in the second or third year of life (Sutton, *op. cit.*). If this individual was at least two years old in 1994, it must be at least 10 years old now. The long life span of *N. reynoldsi* might be explained in part by life history (clutch size of two, reproducing at most once/year; Ashton, unpubl. data) and physiological correlates of fossoriality (i.e., low metabolic rate; Andrews and Pough, *op. cit.*; Withers, *op. cit.*).

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